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REPORT

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COUNTRY Czechoslovakia
SUBJECT Aviation Communications and Radar
2. Tesla Radio Receivers

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THIS IS UNEVALUATED INFORMATION

- 50X1 1. Each airfield had its own communications squadron. The military airfields had military communications personnel and the civilian airfields employed civilian personnel, who served as control tower operators, radio operators, goniometer operators, serviced the airfield lighting systems (runway lights, approach lights, etc.), and stood guard duty and alert details. The squadron strength varied according to the importance of the airfield and the unit mission. In 1950 at the military airfield at Havlickuv Brod ^{4936N-1533E}, there were 30 - 40 persons in the Communications Squadron.
- 50X1 2. Every airfield control tower had radio equipment. Transmitters and receivers such as the German Jalta(sic) FUG-10, and FUG-16 were used. At the start or the end of runways there was static W/T (wireless transmission) of equipment. This DF equipment had loop antennae fixed at 90°. The FUG-16 was used for voice communication with fighter aircraft. The FUG-10 and Jalta(sic) were used for voice and W/T communications with aircraft. DF equipment was used as navigation and landing aid (QGH). It was manned on request according to the current type of operations. During non-active periods only a skeleton watch remained on duty with this equipment. The number of operators varied from two to four. All military operators were NCO's. Main power supplied were normally used. Stand-by generators were available for emergencies.

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3. There was a field telephone link between the control tower and the DF site. At the Havlickuv Brod airfield there was direct contact between the DF site and the main switchboard of the airfield. At Brno, contact from the main switchboard to the DF site was made through the control tower.

50X1 4. A radio network was established between all airfields (with Prague as net control) using secret frequencies and code (voice transmissions). There were also radio links between the various DF sites.

50X1 [redacted] Call signs and codes were changed frequently; frequencies were changed infrequently. There was also a land line telephone connection between airfields.

50X1 5. [redacted]

ground radar stations sometimes gave information to aircraft by W/T. [redacted]

50X1 [redacted] formation flights were directed by radar stations. Only the flight (squadron) leader received the information given by the radar station. Other aircraft in the formation did not use W/T but voice contact. This communication had to be kept to a minimum.

6. Not all aircraft in a flight necessarily had the same communication equipment, and some inter-aircraft communication had to be by hand signals. This lack of uniformity of equipment caused confusion in the fly-past led by General HANUS on May Day 1951. Only a few of the Messerschmitt aircraft which should have been in the fly-past actually joined the formation. Amazingly, there were no crashes when, due to lack of communications, a group of Messerschmitts flew through a group of Siebels. Other than hand signals, no inter-formation communication was possible. (This incident took place away from the parade center.) Upon landing, there was much argument among the pilots as to who had been at fault. Approximately 54 of the 150 Messerschmitts scheduled to take part in the display completed the mission successfully. IL-10 formations were ragged. Jets flew singly. The official reason given for the failure of the display was the existence of a ground haze.

50X1 [redacted] Actually, the visibility was good.

50X1 [redacted] it was the consensus that the poor display was due to the lack of good communications.

50X1 7. The FUG-16 was used on Arado and Messerschmitt aircraft. There was a loop antenna on top of these aircraft and some also had a double "clothes-line" antenna from cabin to tail. The FUG-10 was used on Siebel aircraft, with "clothes-line" antenna and a trailing aerial for long distance communication. The Siebel also carried Lorenz aeriels.

50X1 [redacted] "Clothes-line" aeriels were used on TU-2 aircraft

50X1 8. In 1953 [redacted] the Tesla factory was producing electronic equipment. [redacted] the same firm produced civilian radio and television receivers, and [redacted] Tesla receivers and transmitters were used by the CSA at Prague-Ruzyně. [redacted] a Tesla unit in the office of the chief of crews at Prague-Ruzyně. It operated as a receiver unit. [redacted]

50X1 9. [redacted] listed below some Tesla civilian radio receivers and their prices:

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Blanik 11,000 Crowns
Vltava 7,000 Crowns
Talisman 5,000 Crowns
Largo 11,000 Crowns
Klasik 7,000 Crowns

50X1 10. CSA radio operators bragged that Tesla transmitters and receivers used by the CSA were very good. [REDACTED]

50X1 [REDACTED] Tesla was working on the development of a VHF set which would use 32 crystals. [REDACTED]
[REDACTED]

50X1 11. At Brno-Slatina, [REDACTED] teletype installation carrying a name plate marked Lorenz, and presumed it was connected to other civil airfields. [REDACTED]
50X1 [REDACTED]

50X1 12. As let-down aids, civil airlines in Russia, Hungary, Bulgaria and Rumania used QGH (international "Q" signals) or radio compass. In Poland and Czechoslovakia, QGH, radio compass and Lorenz beam were used.
50X1 [REDACTED]

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